Issuance Date:_?_
Effective Date:_?_
Expiration Date:_?_

STATE WASTE DISCHARGE AND RECLAIMED WATER PERMIT NUMBER ST XXXX (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE AND RECLAIMED WATER PERMIT No. WA-_____)

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
(Regional Office)
In compliance with the provisions of the
State of Washington Reclaimed Water Act, Chapter 90.46 Revised Code of Washington
and the
Water Pollution Control Law Chapter 90.48 Revised Code of Washington, as amended,
(and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq)

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
In compliance with the provisions of
Chapter 90.46 and 43.70 Revised Code of Washington
authorizes

Permittee

Mailing address

City State Zip

to discharge in accordance with the special and general conditions which follow.

Plant Location:	Discharge Location: Legal Description : Section, Range, Township
Treatment Type	Latitude: xx° xx' xx" N Longitude: xxx° xx' xx" W

Name
Section Supervisor
_?_ Regional Office
Washington State Department of Ecology

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SUMMARY OF RECLAIMED WATER PERMIT REPORT SUBMITTALS

Refer to the Special(S)and General (G) Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A. R3.B.	Discharge Monitoring Report (DMR)	Monthly	
R3.A.3.	Monthly Summary of Operating Records	Monthly with DMR	
R3.A.5.	Cross Connection Control Report	Annual	
R4.B.	Water Reuse Plan	1/permit cycle Update as needed	
R4.F.	Service and Use Area Agreement	As needed	
S5.G. R5.C.	Operations and Maintenance Manual	1/permit cycle	(Enter a specific date within 180 days of permit effective date)
G8.	Application for permit renewal	1/permit cycle	Enter a specific date 180 days before permit expiration

Submittals shall be sent to the following addresses:

1. Department of Ecology, Permit Coordinator (Regional Office)
2. Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, 1500 West 4th Avenue, Spokane WA 99204

RECLAIMED WATER CONDITIONS

Beginning on the effective date of this permit and lasting through its expiration date, all wastewater produced by the Permittee for reclamation under this permit shall comply with the Special Conditions (S.) and General Conditions (G.) as well as the Reclaimed Water Conditions (R.) of this permit.

R1. RECLAIMED WATER LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

The production and use of reclaimed water shall be in compliance with all specific conditions and requirements of the Washington State Water Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below:

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized

to distribute Class A reclaimed water to public and private entities for commercial and industrial uses and/or to apply reclaimed water to land for irrigation at agronomic rates at locations listed in Condition R4. The distribution and use of reclaimed water is subject to the following treatment and water quality limitations:

Reclaimed Water Limitations		
Parameter	**Average Monthly[a]**	
Flow	MGD	(Point of Compliance)
Oxidized Wastewater – Secondary Effluent [c]		
Parameter	**Average Monthly[a]**	**Average Weekly [b]**
BOD_5	30 mg/L	45 mg/L
TSS	30 mg/L	45 mg/L
Dissolved Oxygen	Shall be measurably present in secondary effluent at all times	
Coagulated/ Filtered Wastewater – Prior to Disinfection		
Turbidity	**Average Monthly[a]**	**Sample Maximum [d]**
	2 NTU	5 NTU
Disinfected - Reclaimed Water		

Reclaimed Water Limitations		
Total Nitrogen as N	**Average Monthly**[a] mg/L (engineering report)	**Sample Maximum** [d] mg/L (engineering report)
Total Coliform	**7-day Median**[e] 2.2 MPN/ 100 ml	**Sample Maximum** [f] 23 MPN/100 ml
pH	Shall be between 6 and 9 standard units at all times	
Distribution System		
Chlorine Residual	**Minimum Daily** 0.5 mg/L	**Point of compliance** [g]

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

[b] The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

[c] The sampling point for BOD and TSS will be the secondary effluent.

[d] The sample maximum is defined as the value not to be exceeded by any single sample.

[e] The median number of total coliform organisms in the reclaimed water after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

[f] The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.

[g]A chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area, or the storage pond if reclaimed water is not directly piped to the use area.

If there is a daily maximum discharge limitation use the following language: "The daily maximum discharge limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

Note: If there are limits below the quantitation level, refer to language in Condition S1. of the NPDES Municipal permit shell.

to distribute Class A reclaimed water to infiltration basins via surface percolation as listed in Condition R4. The distribution of reclaimed water is subject to the following treatment, water quality and ground water quality limitations:

Reclaimed Water Limitations		
Parameter	**Average Monthly[a]**	
Flow	MGD	(Point of Compliance)
Oxidized Wastewater – Secondary Effluent [c]		
Parameter	**Average Monthly[a]**	**Average Weekly [b]**
BOD_5	20 mg/L	30 mg/L
TSS	30 mg/L	45 mg/L
Dissolved Oxygen	Shall be measurably present in secondary effluent at all times	
Coagulated/ Filtered Wastewater – Prior to Disinfection		
Turbidity	**Average Monthly[a]** 2 NTU	**Sample Maximum [d]** 5 NTU
Disinfected - Reclaimed Water		
Total Nitrogen as N	**Average Monthly[a]** 10 mg/L	**Sample Maximum [d]** 15 mg/L
Total Coliform	**7-day Median[e]** 2.2 MPN/ 100 ml	**Sample Maximum [f]** 23 MPN/100 ml
pH	Shall be between 6 and 9 standard units at all times	
Distribution System		
Chlorine Residual	**Minimum Daily** 0.5 mg/L	**Point of compliance [g]**

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

[b] The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

[c] The sampling point for BOD and TSS will be the secondary effluent.

[d] The sample maximum is defined as the value not to be exceeded by any single sample.

Reclaimed Water Limitations
[e] The median number of total coliform organisms in the reclaimed water after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.
[f] The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.
[g]A chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area, or the storage pond if reclaimed water is not directly piped to the use area.

GROUND WATER ENFORCEMENT LIMITATIONS:	
Primary Drinking Water Criteria	**Sample Maximum[a]**
Nitrate as N	10 mg/L
Nitrite as N	1 mg/L
Arsenic	50 µg/L
Cadmium	5 µg/L
Chromium	100 µg/L
Fluoride	2 mg/L
Mercury	2 µg/L
Nickel	100 µg/L
Total Trihalomethanes (TTHM)	0.10 mg/L
Other Groundwater Criteria	**Sample Maximum[a]**
Total Dissolved Solids	500 mg/L
Chloride	250 mg/L
Sulfate	250 mg/L
Copper	1300 µg/L
Lead	15 µg/L
Manganese	50 µg/L
Silver	100 µg/L
Zinc	5000 µg/L
[a]The sample maximum is the highest allowable concentration for any sample as measured in the ground water at the top of the uppermost aquifer beneath or down gradient of the infiltration site.	

R2. RECLAIMED WATER MONITORING REQUIREMENTS

A. Class A Reclaimed Water Monitoring

Beginning _____and lasting through the expiration date of this permit, the Permittee shall monitor the reclaimed water according to the following schedule:

Parameter	Units	Sample Point[a]	Sampling Frequency	Sample Type

Flow	MGD		Continuous	Recording meter
BOD_5	mg/l	Influent	(weekly minimum- see permit writer's manual)	24-hour composite
		Secondary effluent	(weekly minimum- see permit writer's manual)	24-hour composite
TSS	mg/l	Influent	(weekly minimum- see permit writer's manual)	24-hour composite
		Secondary effluent	Daily	24-hour composite
pH	Standard Units	Influent	Daily	Measurement
		Secondary effluent	Daily	Measurement
		Disinfected reclaimed water	Daily	Measurement
Dissolved Oxygen	mg/L	Secondary effluent	Daily	Grab[b]
		Disinfected reclaimed water	Daily	Grab[b]
Temperature	Celsius	Secondary effluent	Daily	Grab[b]
		Disinfected reclaimed water	Daily	Grab[b]
Turbidity	NTU	Secondary effluent[a]	Daily	Grab[b]
	NTU	Filter effluent prior to disinfection	Continuous	recording meter
Coagulant	Lbs.	Coagulant feed	Daily	Metered usage
Coagulant Aid	Lbs.	Coagulant feed	Daily	Metered usage

Total Nitrogen (as N)	mg/l	Disinfected reclaimed water	Monthly	24-hour composite
Ammonia (as N)	mg/L	Disinfected reclaimed water	Monthly	24-hour composite
Nitrate (as N)	mg/L	Disinfected reclaimed water	Monthly	24-hour composite
Total Coliform[d]	No. of org. per 100 ml	Disinfected reclaimed water	Daily	Grab[b]
Priority Polutants	ug/L	Disinfected reclaimed water	Once per permit cycle	24-hour composite
Total Chlorine Residual	mg/L	Water Reuse Distribution Line	Daily (when in use)	Grab[b]
[a] Secondary effluent shall be taken at *(describe location)* Disinfected reclaimed water samples shall be taken at *(describe locations)*				
[b] Grab samples shall be taken at the same time daily when wastewater characteristics are the most demanding on the treatment facilities and disinfection processes.				
[c]Filter effluent turbidity analysis shall be performed by a continuous recording turbidimeter and shall also be read and recorded at least every four hours.				
[d] As an alternate method, total coliform bacteria may be monitored using the ONPUG-MUG test (also called Autoanalysis Colilert System) per latest edition of standard methods.				

B. Ground Water Monitoring

The sampling points for ground water will be (monitoring wells numbers).

The Permittee shall monitor the ground water according to the following schedule:

Parameter	Units	Minimum Sampling Frequency	Sample Type
Static well water elevation	Feet above sea level	Quarterly(1)	Measurement
Temperature	°C	Quarterly(1)	Measurement
Dissolved Oxygen	mg/L	Quarterly(1)	Grab
pH	Standard Units	Quarterly(1)	Measurement
Conductivity	umhos/cm	Quarterly(1)	Grab

Nitrate NO_3 (as N)	mg/L	Quarterly[1]	Grab
Nitrite NO_2 (as N)	mg/L	Quarterly[1]	Grab
TKN (as N)	mg/L	Quarterly[1]	Grab
Total Dissolved Solids	mg/L	Quarterly[1]	Grab
Total Coliform Bacteria	cfu/100 ml	Quarterly[1]	Grab
Chloride	mg/L	Quarterly[1]	Grab
Cations/Anions: Calcium, Magnesium, Potassium, Sodium, Bicarbonate, Carbonate, Fluoride, sulfate	mg/L	Yearly[2]	Grab
Total Metals: Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Silver, Zinc[3]	µg/L	Yearly[2]	Grab
Total Trihalomethanes (TTHM)	mg/L	Quarterly[1]	Grab

[1]Quarterly is defined as: March, June, September, and December.
[2]Yearly is defined as March.
[3]Analytical method: Arsenic, EPA 206.3 or 206.2; Cadmium, EPA 2007.7 or 213.2; Chromium, EPA 200.7 or 218.2; Copper, EPA 200.7 or 220.2; Lead, EPA 239.2; Mercury, EPA 245.1 or 245.2; Nickel, EPA 249.2; Silver, EPA 272.2; Zinc, EPA 200.7 or 289.1.

C. Sludge Monitoring

The Permittee shall monitor biosolids as required by the Biosolids permit.

D. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise

specified in this permit or approved in writing by the Department of Ecology (Department).

All soil analysis and reporting will be in accordance with *Laboratory Procedures*, Soil Testing Laboratory, Washington State University, November 1981, or the most recent, widely accepted equivalent.

E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

F. Instrumentation Calibration

Monitoring devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations. Calibration records shall be maintanined for at least three years.

The Permittee shall also verify the accuracy of on-line turbidimeters at a minimum frequency of at least once every two weeks.

G. Laboratory Accreditation

All monitoring data required by the Departments of Health and Ecology shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, and internal process control parameters except those listed in Condition R2 are exempt from this requirement.

Crops and soils testing has not been included in the accreditation program. Crops, and soils data shall be provided by reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

R3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall maintain records and report to the Departments of Ecology and Health in accordance with Special Condition S3 , and the following conditions. All

records shall be retained for a minimum of three years.The falsification of information submitted to the Departments shall constitute a violation of the terms of this permit.

A. Reclaimed Water Operational Records

1. Operating records shall be maintained at the reclamation treatment plant or within a central depository within the Permittee's operating agency. These records shall include: records of all analyses performed, records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken

2. Process or equipment failures triggering an alarm that is key to maintaining reliability of reclaimed water quality shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.

3. A monthly summary of operating records as specified above shall be submitted with the Discharge Monitoring Report form to The Departments of Ecology and Health at that address listed under R3.B. below.

4. Cross Connection Control Report. An annual cross-connection control report shall be submitted to the Departments of Health by a certified Cross-Control Specialist identifying all devices tested and any cross-connection incidents which occurred in the reuse system.

B. Submittal Reporting:

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Departments of Health and Ecology, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. *(Optional) Priority pollutant analysis data shall be submitted no later than 45 days following the reporting period*.

Monitoring Report forms must be submitted monthly whether or not the facility is reclaiming and distributing reclaimed water. If the reclamation facility was not operating during a given monitoring period, submit the form as required with the words "no reclamation or reuse" entered in place of the monitoring results.

Reclaimed water monitoring reports shall be submitted to the following addresses:

1. Department of Ecology, Permit Coordinator, (Regional Office)

2. Department of Health, Water Reclamation and Reuse Program,Division of Drinking Water, 1500 West 4th Avenue, Spokane WA 99204

R4. RECLAIMED WATER DISTRIBUTION AND USE

The Permittee shall monitor the reclamation facility loading in accordance with Special Condition S4. and the following conditions.

A. Design Criteria and Plan to Maintain Adequate Capacity

Design flows for the permitted reclamation facility shall not be exceeded:

Average flow for the maximum month:

When the actual flow reaches 85 percent of the above design criteria for three consecutive months, or when the projected increases would reach design capacity within five years, whichever occurs first, the Permittee shall submit to the Department, a plan and a schedule for continuing to maintain capacity at the facility sufficient to achieve the reclaimed water limitations and other conditions of this permit.

Engineering documents associated with the plan must meet the requirements of the Water Reclamation and Reuse Standards and WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

B. Authorized Uses and Locations

Beginning on _____ and lasting through the expiration date of this permit, The Permittee is authorized to distribute water reclaimed in accordance with the terms and conditions of this permit for authorized uses.

The distribution by the Permittee of reclaimed water that does not meet the treatment, water quality and monitoring requirements established in this permit or the use of reclaimed water other than for authorized uses and locations listed in a Department of Health and Ecology approved reclaimed water engineering report shall constitute a violation of the terms and conditions of this permit.

The Permittee may produce and distribute Class A reclaimed water for the following uses at the following locations: (generally list uses and locations and rate of use)

C. Water Reuse Plan

The Permittee shall prepare a water reuse plan, which contains a summary description of the proposed water reuse system from the approved Engineering Report. The plan shall be submitted to the Departments of Health and Ecology within (specify time) after the permit effective date. The Permittee shall review the plan at least annually and the plan shall be updated whenever new uses or users are added to the distribution system. A copy of the revised plan shall be submitted to Ecology and Health. The plan shall contain, but not be limited to, the following:

1. Description of the reuse distribution system;

2. Identification of uses, users, location of reuse sites.

3. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.

D. Bypass Prohibited

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology

E. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

1. Alarms and standby power source

2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.

3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

F. Use Area Responsibilities

1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.

2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area.

3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department of Ecology or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.

4. Where the reclaimed water production, distribution and use areas are under direct control of the permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

G. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the permittee:

1. The person(s) who provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this Permit.

2. Reclaimed water uses, including runoff and spray, shall be confined to the designated and approved use areas.

3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and

monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each Service and Use Area Agreement must be submitted to and approved by the Departments of Health and Ecology prior to implementation.

4. The Service and Use Area Agreement shall provide the Permittee with authority to terminate service of reclaimed water to a customer violating the State Water Reclamation and Reuse Standards and restrictions outlined in the Service and Use Area Agreement. The Service and Use Area Agreements shall be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.

5. No reclaimed water shall be distributed by the Permittee without a reclaimed water service and use agreement approved by the Departments of Health and Ecology.

H. Reclaimed Water Ordinance

The Permittee shall complete a local ordinance to include policies and procedures for the distribution and delivery of reclaimed water. The ordinance shall provide the Permittee with the authority to terminate service of reclaimed water from any customer violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement.

I. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water shall be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) shall be submitted to the Washington Department of Ecology for approval.

2. There shall be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.

3. There shall be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.

4. The reclaimed water shall not be applied to the irrigation lands in quantities that:

    a. Significantly reduce or destroy the long-term infiltration rate of the soil.

    b. Cause long-term anaerobic conditions in the soil.

c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.

d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

J. Surface Percolation Use

1. For any surface percolation of reclaimed water in the storage infiltration basin, the hydraulic loading rate shall be determined based on a detailed water balance. The calculated loading rate(s) and the parameters and methods used to determine the loading rates shall be submitted to the Department of Ecology for approval along with the irrigation use report above and is due by _____.

2. Background/natural groundwater quality must be documented and sampling locations identified and approved by Ecology.

3. Surface waters shall not be impaired due to the infiltration of reclaimed water.

K. Wetlands Use

1. Augmentation of wetland hydrologic regime is not to exceed an additional (above background) average annual hydraulic loading rate of 2 cm/day to Category II wetlands and 3 cm/day to Category III and IV wetlands, unless monitoring can demonstrate that a net ecological benefit.can be maintained at a higher rate.

2. Average monthly water level elevations shall not increase by more than 10 cm above the pre-augmentation water level.

3. In Accordance with the Water Reclamation and Reuse Standards, the Permittee shall monitor the vegetation cover, plant diversity, macroinvertebrate biomass, amphibian species, fish biomass and species, bird density and species, threatened/endangered density and species once per year during the 1st, 2nd, 4th, 6th , 8th and 10th growing season. There shall be no more the 25% reduction in parameter measurements over the wetland or 50% reduction at any one location in the wetland. The

Permittee shall submit a report to Ecology on the results of the biological monitoring.

R5. OPERATION AND MAINTENANCE

The Permittee shall operate and maintain the facility loading in accordance with Special Condition S5. and the following conditions.

A. Certified Operator

An operator certified for at least a Class III plant by the State of Washington shall be in responsible charge of the day-to-day operation of the water reclamation plant. An operator certified for at least a Class II plant shall be in charge during all regularly scheduled shifts.

B. Reclaimed Water System Maintenance

The Permittee shall institute an adequate operation and maintenance (O&M) program for the entire reclamation facility. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, collection, distribution and use areas. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

1. At all times, the reclamation facility, distribution and use areas shall be maintained to ensure that all equipment is kept in a reliable operating condition.

2. A chlorine residual of at least 0.5 mg/l shall be maintained in the reclaimed water during conveyance from the reclamation plant to the use area unless waived by the Departments of Health and Ecology.

3. Maintenance of a chlorine residual is not required in reclaimed water impoundments and storage ponds. At the discretion of the Departments of Health and Ecology, chlorine residual may not be required in reclaimed water distributed from storage ponds.

C. Operation and Maintenance Manual

The Operation and Maintenance Manual for the facility shall include the following reclaimed water information:

1. An alarm condition response plan to ensure that no untreated or inadequately treated wastewater will be delivered to the use areas.

2. A discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of cross connection control devices.

3. Operational strategies for the reclaimed water use areas.